

**MARYLAND HIGHER EDUCATION COMMISSION
MARYLAND ENERGY ADMINISTRATION**



**Maryland
Offshore Wind Energy
Research Challenge
Grant**

Request for Proposal

Proposal Due Date:

April 14, 2014 by 3:00 p.m.

Deliver to:

Melinda Vann

Maryland Higher Education Commission

6 N. Liberty Street, 10th Floor

Baltimore, MD 21201

mvann@mhec.state.md.us

**Maryland Offshore Wind Energy Research Challenge Grant Program
FY 2014**

TIMETABLE

March 4, 2014	Request for Proposal (RFP) Release
March 14, 2014	Technical Assistance Webinar – to support proposal development. Time 11:00 a.m. – 12:30 p.m. Please register for MOWER II Webinar at https://attendee.gotowebinar.com/register/7266964075427797506 . After registering, you will receive a confirmation email containing information about joining the webinar.
April 14, 2014	<u>Proposals Due 3:00 p.m.</u> <i>(hard copies and electronic copy)</i> Melinda Vann Maryland Higher Education Commission 6 N. Liberty Street, 10 th Floor Baltimore, MD 21201 mvann@mhec.state.md.us
May 22, 2014	Awards and Conditional Awards Announced Grant Period begins
June 20, 2014 (approximate)	First payment issued (50% of award)
December 2014 (approximate)	Mandatory Project Director Meeting
May 18, 2015	Annual Progress Report Due. Final payment issued pending report review and approval. Approximate pay date, July 1, 2015.
December 2015 (approximate)	Mandatory Project Director Meeting
May 26, 2016	Grant ends. No new activities or expenditures after this date are supported by the grant unless a one-time no-cost extension has been jointly pre-approved by MHEC & MEA
August 28, 2016	Final Narrative and Fiscal Reports Due All unexpended funds must be returned

Maryland Offshore Wind Energy Research Challenge Grant



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Maryland Offshore Wind Energy Research Challenge Grant Program



BACKGROUND INFORMATION

Maryland's higher education institutions are uniquely situated to aid the State and the nation in advancing the understanding of economical and environmentally sound deployment of offshore wind (OSW) energy. Maryland public higher education institutions are invited to submit a proposal for a one-time research grant to support the deployment of the offshore wind energy industry in the State.

Governor Martin O'Malley is working to position Maryland as an industry leader in renewable energies such as offshore wind. He worked to ensure that the merger of Exelon and Constellation Energy provided commensurate public benefits to Maryland. Among the commitments resulting from that process, a one-time research funding opportunity is made available to Maryland's public two- and four-year higher education institutions for research related to the deployment of offshore wind energy in Maryland. This grant program, administered by the Maryland Higher Education Commission and guided by the technical expertise of the Maryland Energy Administration, aims to harness the vision, expertise and ambition of Maryland's higher education research community by supporting efforts to establish new or enhance existing expertise and capacity in offshore wind energy research, technology development, and deployment. Applicants are encouraged to propose research projects and topics that will be perpetuated and secure a reputation within a niche field of expertise, using additional funding sources beyond the activities of this specific grant funding.

The Challenge

While early offshore wind development efforts are gaining momentum, the first offshore wind turbine has yet to be deployed in North American waters. By contrast, Europe and parts of Asia are already enjoying the economic benefits of massive expansion of the offshore sector, benefitting from over 20 years of experience.

The U.S. Department of Energy (DOE) set a goal that 20% of our nation's energy consumption would derive from wind by the year 2030, as well as a strategy to achieve it (<http://www.nrel.gov/docs/fy08osti/41869.pdf>). States have been quick to move on land-based wind energy initiatives. However, offshore deployment has not kept pace with the goals set forth by the DOE. Technological, logistical, fiscal, and political challenges have been encountered. Continuing uncertainty surrounding the federal budget and thus federal incentives for renewables has encouraged state level policymakers to develop innovative policy approaches to support the development of the renewable energy industry. Maryland, like other states, views offshore wind energy as a positive economic development opportunity associated with supply chain and infrastructure investment, and job creation.

The offshore wind energy sector, in all its phases from research to manufacturing to deployment to operations and maintenance offers tremendous job creation opportunities for states that move forward aggressively. This economic activity can have a profound multiplier effect that can benefit other sectors and enhance Maryland's tax revenues. However, to ensure the long-term sustainability of this workforce, Maryland must achieve a first-mover advantage by making strategic early investments in the most economically beneficial sectors of the supply chain. For this reason, many of the states along the eastern seaboard are competing to attract original equipment manufacturers (OEM) of the major components such as the wind turbines, blades, nacelles and towers which in turn will stimulate manufacturing of secondary and tertiary supply chain components.

An offshore wind industry requires significant upfront investment at all stages of development, including geophysical and geotechnical surveys, turbine array planning, foundation and turbine design, commissioning and deployment of installation vessels, development of port infrastructure and superstructure to accommodate heavy loads, and establishment of turbine manufacturing capacity and grid connection. However, this investment can have a lasting impact on the geographic distribution of economic benefits. States that secure a U.S. turbine manufacturing facility will most likely supply wind farms across a broad region of the U.S. Key turbine component fabrication and assembly are also important drivers of local economic benefit as their workforce requirements can be considerable.

Maryland has many resources it can apply to capture offshore wind economic development benefits. These include a progressive renewable portfolio standard which requires that 20% of the electricity sales originate from a renewable source by the year 2022. Waters in the Atlantic Ocean, east of Maryland's coast are home to outstanding wind resources and a gently sloping Outer Continental Shelf. Further, the State enjoys a highly proficient work force with skills in many of the relevant technologies, developed from working with many industry sectors including Defense.

Maryland's higher education institutions have an opportunity to move into this promising industry and advance their own research and workforce development programs while adding value to Maryland's offshore wind energy deployment efforts. This grant program is designed to provide financial support to Maryland public higher education institutions that seek to play an important role in Maryland's emergence within the U.S. and the global offshore wind energy industry.

Maryland Offshore Wind Energy Research Challenge Grant Program

GRANT PROPOSAL OVERVIEW

Purpose: This grant program supports research projects to address significant issues informing the implementation of offshore wind energy as a means of creating a sustainable clean energy source for the State of Maryland. Applicants will propose projects that specifically support Maryland's offshore wind energy development, complement existing research knowledge and industry expertise, and are not duplicative of currently known research findings.

Eligibility: All Maryland two- and four-year public higher education institutions and consortia of one or more Maryland public higher education institutions.

Award: Awards will range between \$150,000 up to \$600,000 per project. A minimum of two awards is anticipated. The available funding amount for disbursement is approximately \$945,000.

Grant Period: May 22, 2014 – May 26, 2016 (24 months).

Priority Funding: Priority funding consideration will be given to proposals that: 1) link proposed research with topical subjects that can be applied in the preparation of, or during the deployment of Maryland's offshore wind facility in the near term; 2) demonstrate the addition of other external funding sources for sustained effort; 3) offer institutional in-kind or matching funds and 4) provide a direct correlation to lowering the cost of offshore wind energy generation.

Research Topics: Unlike the previous RFP released in 2013, which sought research in broad topical areas, the 2014 RFP seeks more in depth analysis and understanding in research areas and topical projects that can put 'Maryland of the map' in areas of research expertise within specific OSW disciplines. Fundable topics include but are not limited to:

1. ***Advancing Foundation Technologies:*** materials, design and manufacturing for OSW deployments, particularly as it relates to the Maryland OSW facility and deeper waters.
2. ***Innovative yet Practical Offshore Wind Operations and Maintenance Practices*** that will contribute to driving down the lifetime cost of Maryland's offshore wind facility and potentially contribute to lowering costs of other offshore wind facilities.
3. ***Design of Cable Array and Substation Permutations for Grid Interconnection and Transmission*** with focus specifically on Maryland-based OSW growth within the mid-Atlantic region.

4. ***Optimizing Maryland's Logistics, Facilities and Processes*** for efficient, cost effective, and safe deployment.

It is strongly recommended, that applicants refer to the examples provided for each of these topical areas in Appendix 1. This information will give the principal investigator a better understanding of the types of projects sought in this competitive grant program.

Application Due Date: April 14, 2014 by 3:00 PM

Deliver one hard copy with original signatures, four hard copies AND one electronic copy (word doc or PDF) to:

Melinda Vann

mvann@mhec.state.md.us

**Maryland Higher Education Commission
Attention: Melinda Vann
Director, Outreach and Grants Management
6 N. Liberty Street, 10th Floor
Baltimore, MD 21201**

Maryland Offshore Wind Energy Research Challenge Grant Program

PROPOSAL FORMAT

General Format Requirements

1. Typed in 12-point Arial, Times New Roman, Calibri, or a similar font type and size (single-spaced okay); smaller font may be used for tables or formulas as long as the type is legible.
2. 8-1/2 by 11-inch pages and one-inch margins.
3. The proposal narrative must not exceed 18 pages. Narrative pages must be numbered. The page limit includes only elements of the proposal narrative, not the cover sheet, abstract, budget, budget narrative, curriculum vitae, resumes, or appendices.
4. All parts of the proposal must be submitted together, using appropriate forms from Appendix 2. The RFP and forms are also posted to <http://www.mhec.state.md.us/Grants/index.asp>
5. The original signed hard copy of the proposal and four copies must be submitted to Melinda Vann, Maryland Higher Education Commission, 6 N. Liberty Street, 10th Floor, Baltimore, MD 21201 by the stated deadline. Electronic copy (PDF or Word doc) shall also be sent to mvann@mhec.state.md.us.

The grant proposal must include the following components, though no points are awarded for these.

- Proposal Cover Sheet
- Project Abstract - one page or less single spaced describing the project. Include the project objective (research question/problem to investigate), methodologies, and projected outcomes. The abstract should be suitable for editing for possible press releases or publication to MHEC, MEA or other websites.

PROPOSAL NARRATIVE (85 total points, three sections)

The following outline guides the proposal narrative describing the project. This outline will also guide the review panel in considering funding for your proposal. Individual sections do not have point divisions other than what is indicated below. Be sure to label the narrative sections with the same headings as given below.

Research Question(s) or Problem(s) to be Addressed (25 points)

- Describe the general topic area that that principal investigator plans to address. Explain why this topic was chosen. For example, what are the intellectual merits and the practical applications of the proposed activity as it relates to Maryland's proposed offshore wind facility? How does the project benefit future U.S. and overseas offshore wind facilities, thereby enhancing Maryland's OSW expertise?
- Summarize current related research findings including citations that support the proposed area of investigation. References should be included in an appendix.
- Identify the specific research question(s) or problems the project is designed to address; describe its uniqueness as well as context with other related research, and discuss how the project will address those issues.
- Discuss the implications of the research for the implementation of offshore wind energy production off Maryland's coast and define how this research is expected to contribute to lowering the cost of offshore wind.

Project Personnel and Institutional Resources (15 points)

This section describes the qualifications and expertise of the principal investigator, key project personnel; and any institutional resources that will support the proposed project. A brief discussion of the principal investigator's research, publications, and project management experience should be included. Identify additional key personnel, their respective roles and responsibilities, and their expertise/qualifications as it relates to the project. Include curriculum vitae or resumes for the principal investigator and all key personnel in an appendix. Include a brief discussion of key personnel's related research and publications that demonstrate their qualifications. Discuss how institutional resources will be attained and managed to support the research team's work. This section should also provide a clear organization structure for managing the project, and demonstrate that the principal investigator and other key staff have sufficient time to conduct the work within the grant period. If funds are requested for personnel, linkages between the narrative and the budget should be evident.

Technical Approach and Operation Plan (45 points)

This section describes the activities that will be conducted to address the research questions or problems identified. The project technical approach and operation plan must contain sufficient detail to show project development, the timeline of events, major milestones, data collection, data management, and the analysis methodology. The principal investigator should indicate what, if any institutional approvals will be secured in compliance with institution specific research requirements (e.g. institutional review boards, scientific review committee).

The Technical Approach and Operation Plan must:

- describe the techniques, procedures, and methodologies to be used;
- describe data collection, data management, and data analysis plans;

- describe anticipated results or outcomes;
- provide a detailed plan that describes each activity, how it relates to the project, where and how each activity will be implemented and the key personnel responsible for each activity;
- map activities and expected deliverables with clear linkages to the budget;
- provide detailed information about what will be taking place during each activity (when will it take place, how long will it last, etc.);
- establish milestones/benchmarks and a timeline of all project activities;
- discuss the means by which project progress and efficacy will be measured and how often project effectiveness will be examined; and
- discuss how project findings will be shared (e.g. publication, conference presentation).

BUDGET AND BUDGET NARRATIVE (15 points)

The budget and budget narrative must clearly link all project costs including personnel and activities with the technical approach and operation plan. The budget and budget narrative should provide information about institutional commitment to the project including the amount of staff time dedicated to the project and any matching cash or in-kind contributions if they are supplementing the project. Indirect cost recovery of up to ten percent of the direct costs paid by the grant is permitted. The budget and budget narrative do not count toward the 18 page narrative limit. The proposal's budget and cost-effectiveness will be evaluated on the extent to which:

- the budget is adequate to support the project -- it must be clear that all activities are accounted for in the budget;
- the costs are reasonable in relation to the project design and activities;
- the budget complies with the guidelines laid out in this RFP;
- there is adequacy of support—including facilities, equipment, supplies, and other resources—from the lead institution and any other partners identified;
- administrative costs are kept to a minimum; and
- institutional in-kind contribution or matching costs, while not required, are reported where applicable.

Indirect costs may be charged to the grant up to 10% of the total direct costs covered by the grant award.

Budget Proposal Form

The proposed budget including both requested grant funds and institutional in-kind or other institutional contribution must be presented using the form provided in Appendix 2. A copy of the Excel spreadsheet is also posted to the MHEC website at <http://www.mhec.state.md.us/Grants/index.asp>.

Use the same budget categories as indicated on the budget form. Add as many rows as needed to provide a listing of expenditures where "list" is indicated. Report anticipated grant expenditures for year one in the first column (1) and anticipated grant expenditures for year two in column two (2). Column three (3) is the sum of requested grant funds for years one and two. Any institutional in-kind or other contribution, if

provided, should be reported in column four (4) for the entire grant period. Column five (5) is the total project cost and includes all grant funds requested in years one and two and institutional in-kind or other support.

Budget Narrative

The budget narrative is used to explain and justify the proposed grant funding request and in-kind or other contribution for the project. It explains the rationale for each line item in the budget and provides specific information about how such costs were computed. Label the budget narrative using the same budget categories in the same order as the budget proposal form. An explanation of budget categories and proposal expectations follow.

Salaries and Wages

List individually, all key personnel and the requested salary amounts to be funded during the summer and/or academic year by indicating what percent of the individual's annual time will be committed to the project. If effort is committed as an in-kind institutional contribution, the value must be noted in column four.

List individually, all support personnel by support category and the requested rate of pay. Support personnel must be clearly justified and may include clerical, graduate and undergraduate assistants. If effort is committed as an in-kind institutional contribution, that must be noted in column four.

Estimates of personnel time must be justified in terms of the tasks to be performed. Salaries are to be a function of regular appointment (% time commitment) for the academic year or the summer session(s), if applicable. Salaries cannot be drawn at a higher pay rate than that which the individual normally receives. Computations for salary or wage project staff should be included (e.g. 20 hours @ \$15 an hour, or 10% of 10 month salary, one course release for each of fall, spring and summer semesters @ \$x,xxx per course release).

Fringe Benefits

Fringe benefits are calculated at the costs normally paid by the institution for the salaried members of its faculty and staff who will be involved in the project. The amount of fringe requested in the grant proposal should represent the percentage of effort in the project. If fringe is paid on wage employees, show how that was computed separately.

Travel

Enter travel costs if necessary for key personnel to conduct off-campus activities. Mileage allowances may not exceed the State's approved rate for mileage reimbursement at the time of travel. Currently this rate is \$0.56 per mile. All travel funding must be specifically designated by place, for whom, approximate date, distance, and method of travel. Conference travel, including international travel, may be approved on a limited when well justified, for example, to present results at a national or international conference with the specific aim to seek new funding for project continuation.

Equipment

Equipment means an article of non-expendable tangible personal property having a useful life of more than one year and an acquisition cost per unit that is consistent with institutional policy. Equipment expenses must be documented with written estimates, invoices, etc. and be purchased in compliance with institutional procurement procedures. Discuss the “life expectancy” of any grant purchased equipment, role of the equipment in the project, any maintenance plans if applicable, and how equipment will be used after grant period has ended.

Materials and Supplies

Materials and supplies refers to expendable and non-expendable supplies, including but not limited to books, computer software, laboratory or field supplies, and other items necessary for the effective implementation of the funded activity.

Contractual Services

Use of program consultants or other contractual services must be justified and reasonable. Consultant pay must be a reflection time spent delivering direct services. Travel and per diem expenses for consultants must not exceed the State of Maryland rate (<http://www.dbm.maryland.gov/agencies/Pages/FleetTravel.aspx>). Preparation time for consultants will not be paid by the grant. Properly documented contractual agreements for expenditures to consultants or outside agencies for fees, travel, and routine supplies must be filed per institutional policy; and contractual payments may not exceed institutional salary levels for similar work. Documentation for consultant services performed must be filed showing the consultant’s name, dates, hours, and amount charged to grant and results of subject matter of the consultation. Any consultant final reports will be part of the grantees final report. All contractual services must be procured in accordance with institutional procurement requirements and procedures.

Other (list each expenditure separately)

All expenditures that do not fall into any of the above budget categories should be detailed in the OTHER category. List each expenditure separately. “Other” expenditures might include insurance, costs associated with space rental not covered by a long term lease, miscellaneous expenditures related to permits, etc. Explain why these costs are necessary for the implementation of the project. Provide specific information that shows how amounts were computed.

Total Direct Costs

Total direct costs are derived by summing all requested grant funds and matching/ in-kind funds by column.

Indirect Costs

Up to 10% of the grant funds awarded for direct program costs (sum of year one and year two grant funds) may be used to support indirect cost recovery (Facilities and

Administrative Costs - F & A). Any indirect costs exceeding this limitation must be provided from institutional matching or in-kind contributions. Applicants must provide evidence of how indirect costs were established if claiming as in-kind contribution (e.g. approval by federal government).

Total

Total refers to total project costs and is the sum of the requested grant funds and the institutional match or in-kind support if provided. Be sure to reconcile the total in each line and each column.

Note: Be sure to reconcile the budget form totals with the budget narrative. If changes are made to the budget in the final stages of proposal preparation, be sure to update the narrative and vice a versa. If the narrative and the budget form have different amounts, reviewers will recommend funding the lower of the two amounts.

ASSURANCES (required no points)

Each grant proposal must be accompanied by a Statement of Assurances signed by the appropriate organizational representative. Use the form provided in Appendix 2.

Maryland Offshore Wind Energy Research Challenge Grant Program

PROPOSAL REVIEW PROCESS

Overview of Review Process

- Proposals must include all requisite forms. The RFP and required forms are available at <http://www.mhec.state.md.us/Grants/index.asp>
- Applicants will receive electronic notification that their proposal has been received and assigned a proposal number.
- A panel of qualified reviewers will read each proposal and score each according to the criteria summarized in the Evaluation and Selection Criteria section below. Each proposal is read and scored by at least three reviewers. Every effort is made to ensure that there are no conflicts of interest and reviewers are required to sign a conflict of interest agreement.
- The review panel is convened after members read the assigned proposals individually. Panel members discuss their scores, recommendations for funding, and any recommendations for adjustments to projects. They share comments about improvements that are required to enhance fundability of a given project. Reviewer comments will be made available to all applicants whose proposals are not funded. The Secretary of Higher Education and the Secretary of Energy will take the review panel recommendations, along with funding priority and geographic distribution of awards into consideration. The Secretaries (or designees) shall jointly name the final awardees.

Evaluation and Selection Criteria

The rating given for each criterion (see below) will serve as a significant, but not the only, aspect of the judgment made by the Review Panel. The overarching evaluation of the proposal will be based on the following:

- The degree to which the proposed project meets the funding priorities for the grant.
- The proposed project or research topic is relevant to Maryland's offshore wind energy sector.
- Where appropriate, the project clearly demonstrates how it will build upon previous efforts in the field.
- The project highlights the higher education institution's expertise and/or raises institutional prestige in the field of offshore renewable energy.
- Where possible, project proposals that have a longer time frame should include any appropriate plan to secure additional support or funding in the future.

- The project has a demonstrated link for practical or commercial application.
- The applicant describes how his/her proposed work has the potential to favorably impact private sector businesses, especially highlighting any existing Maryland emerging businesses, Minority Business Enterprises (MBE), Women’s Business Enterprises (WBE), and small businesses.

Each proposal will be specifically evaluated by the review panel as follows:

Application Scoring Rubric

Category	Maximum Points
Research Question (s) or Problem to be Addressed	25
Project Personnel and Institutional Resources	15
Technical Approach and Operation Plan	45
Budget and Cost Effectiveness	15
TOTAL	100

Five bonus points will be awarded for projects meeting the overarching and priority funding areas identified on page five of the RFP and detailed in the section above.

The Maryland Higher Education Commission and Maryland Energy Administration reserve the right to negotiate budgets and project activities before awarding a grant.

NOTIFICATION OF AWARDS

Preliminary notification of awards will be made on **MAY 22, 2014** by email. Some projects may receive a conditional award notice with requests for further clarification, project changes, and/or budget revision. Once all conditions are agreed to and met, a formal award letter, grant award notice, copy of invoice initiating first payment, and the mandatory grant provisions will arrive by mail. Projects may begin at the time of preliminary and/or conditional award notice, provided that the principal investigator agrees with any requested revisions. No funds will be disbursed for conditional awards until all conditions of the award are met and the acceptance of any negotiated changes by the principal investigator. Fifty percent of the award will be issued within 90 days of notice of award. The balance of funds will be released pending review and approval of an annual progress report. Annual progress reports will be jointly approved by MEA and MHEC. All grant payments are contingent upon funding by the grantor, the Exelon Corporation. Please refer to Appendix 3 for Post Award Grants Management Procedures.

CONTACT INFORMATION AND RESOURCES

Faculty who are interested in applying for one of these grants may contact Ross Tyler, Maryland Energy Administration at Ross.Tyler@maryland.gov or 443.694.3077 for more information about the *technical programmatic aspects* of the Maryland Offshore Wind Energy Challenge Grant Program. Contact Melinda Vann, at the Maryland Higher Education Commission for questions about *administration of the grant* to include

proposal process, review, award, and post award procedures at mvann@mhec.state.md.us or 410.767.3269.

Refer to Appendix 1 and to the *Topics* section in this Request for Proposal for examples of the types of Offshore Wind Energy projects that might be considered for funding.

APPENDIX 1

Maryland's Offshore Wind Energy Promising Topical Research Projects

Topic Area One: Advancing Foundation Technologies. Materials, design and manufacturing for OSW deployments, particularly as it relates to the Maryland OSW facility and deeper waters.

- *Should Maryland confront challenges of using a tradition monopile foundation and look to alternatives?*
- *What alternatives are available or could be available to Maryland, where costs can be lowered; jobs may be created; and foundations can be exported?*

Topic Area Two: Innovative Offshore Wind Operations and Maintenance.

Innovative yet practical offshore wind operations and maintenance practices that will contribute to driving down the lifetime cost of Maryland's offshore wind facility and potentially contribute to lowering the costs of other offshore wind facilities.

- *O & M is presently estimated to contribute to 28-39% of the OSW lifetime cost - the true cost is not known. Challenge: how can this high percentage be decreased?*
- *Trends in Europe include:*
 - *Making data meaningful before End of Warranty period.*
 - *Standardizing O & M across technology types rather than within regions. Is there room for open source and sharing of performance?*
 - *What practices can be applied by owners to improve the operations and power generated revenue and lower the real cost of the maintenance over the (extended) lifetime of the project?*

Topic Area Three: Design of Cable Array and Substation Configuration with Transmission Planning and Grid Interconnection for OSW Growth.

Design of cable array and substation permutations for grid interconnection and transmission with focus specifically on Maryland-based OSW growth within the mid-Atlantic region.

- *Developers and State ambitions differ: Developers want return on investments in specific wind facilities including the cabling and transmission but the state seeks incremental expansion.*
- *Challenge: how to optimize the array cables, marine substation, export cable(s) and grid interconnection in a manner that provides developers and investors their ROI yet supports incremental growth but avoids 'stranded assets' or 'redundant assets.'*

Topic Four: Optimizing Maryland's Logistics, Facilities and Processes for Efficient, Cost Effective, and Safe Deployment.

- *Europe continues to experiment with different operational procedures and logistical configurations to minimize time and expense.*

- *What lessons learned could be applied to Maryland's offshore wind? What would be the theoretical optimal deployment solution for Maryland? How do the Maryland businesses view this and what adaptive approaches are required because of unique U.S. characteristics such as the Jones Act or Maryland characteristics such as Baltimore being the favored marshaling and lay-down area but so far inland?*
- *Is there a guiding tool box that can be generated to help developers understand the consequences of their deployment approach that utilized the past and present practices of Europe in the Maryland and U.S. context? Are there innovative suggestions for new approaches?*

APPENDIX 2

Proposal Forms

Cover Sheet

Abstract

Budget Form

Statement of Assurance

Maryland Offshore Wind Energy Research Challenge Grant Program

Request for Proposal Cover Sheet

Lead Institution: _____

Project Title: _____

Principal Investigator _____ Email: _____

Phone: _____ Mailing Address: _____

Co-Investigator(s): _____ Email: _____

Phone: _____ Mailing Address: _____

Partnering Institutions (add rows as needed)

Institution	Contact Person	Contact email

Post Award Grants Office Contact Name & Title:

Email: _____ Phone: _____

Mailing Address: _____

Finance or Business Office Contact, Name & Title:

Email: _____ Phone: _____

Mailing Address: _____

**Certification by Authorizing Institution Official
(Chief Academic Officer, Provost, V.P. level or above):**

Name: _____ Title: _____

Signature: _____

Maryland Offshore Wind Energy Research Challenge Grant Program

Maryland Offshore Wind Energy Research Challenge Grant Proposal Budget

Institution:

Principal Investigator:

Project Title:

	Column 1	Column 2	Column 3	Column 4	Column 5
Budget Category	Grant Expenditures Year 1	Grant Expenditures Year 2	Total Grant Funds Requested	Match/In Kind Year 1 & 2	Total Budget
Salaries and Wages (list each name/position) subtotal					
Fringe Benefits					
Travel					
Equipment (list) subtotal					
Materials & Supplies					
Contractual Services					
Other (list) subtotal					
Total Direct Costs (sum of all budget categories above)					
Indirect Cost (may not exceed 10% of total direct grant funded costs)					
Total Cost (Direct + Indirect)					

(see excel spreadsheet available on website)

Maryland Offshore Wind Energy Research Challenge Grant Program

STATEMENT OF ASSURANCES

The applicant hereby affirms and certifies that it will comply with all applicable regulations, policies, guidelines, and requirements of the Maryland Higher Education Commission, the State of Maryland, and the Federal Government as they relate to its acceptance, and use, of funds for this project. Also, the applicant affirms and certifies that:

1. It possesses legal authority to accept the award; e.g., an official act of the applicant's governing body has been duly adopted or passed, authorizing the filing of the application, including the acceptable of all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of governing body on the application and to provide such additional information as may be required.
2. It will comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d) prohibiting employment discrimination where discriminatory employment practices will result in unequal treatment of persons who are or should be benefiting from the grant-aided activity.
3. It will comply with all federal and state laws prohibiting discrimination and will comply with the Americans with Disabilities Act, the Family Educational Rights and Privacy Act, the Pro-Children Act (prohibiting smoking in the presence of children), and the laws set forth in OMB Standard Form 424B.
4. It will comply with all required assurances, certifications and research-related regulations as defined by the applicant institution's Office of Sponsored Research or its equivalent.
5. It will expend funds to supplement new and/or existing research projects and not use these funds to supplant non-grants funds.
6. It will participate in any statewide assessment program or other evaluation program as required by the Maryland Energy Administration (MEA), the Maryland Higher Education Commission (MHEC), and/or the State of Maryland, and make its research and research records available if requested.
7. It will give MEA, MHEC and/or the Maryland Legislative Auditor, through any authorized representative, the right of access to, and the right to examine all records, books, papers, or documents related to the grant.
8. It will comply with all requirements imposed by MEA and/or MHEC concerning special requirements of law and other administrative requirements.
9. The applicant further certifies that all of the facts, figures and representations made with respect to the grant proposal and grant award, including the exhibits and attachments, are true and correct to the best of applicant's knowledge, information, and belief.

Institution: _____

Signature of Authorized Institutional Authority

Name and Title, Printed

Date

APPENDIX 3

Grant Management Post Award Procedures

POST AWARD GRANT MANAGEMENT PROCEDURES

1. FISCAL PROCEDURES

All funds under this program must be assigned to a specific account. If an institution receives more than one grant award, separate accounts must be established for each. For this grant cycle, grant awards will be disbursed in two payments. The first payment will be 50% of the total grant award. The second payment will be released pending receipt and approval of the required annual progress report. Expenditures in excess of approved budget amounts will be the responsibility of the recipient institution.

2. POST-AWARD CHANGES

The grant recipient shall obtain prior written approval for any change to the scope of the approved project. To request changes, obtain a project amendment form from Melinda Vann at mvann@mhec.state.md.us. The project amendment request must include an explanation of the specific project changes proposed and/or a revised budget, as applicable. Justification for the changes must be provided. If project activity dates have changed significantly since the proposal submission, you must submit a revised calendar of activity dates and milestones.

The grant recipient shall also obtain prior written approval from the Office of Outreach and Grants Management at the Maryland Higher Education Commission:

1. to continue the project during any continuous period of more than three (3) months without the active direction of an approved principal investigator or director;
2. to replace the principal investigator or any other persons named and expressly identified as a key project person in the proposal or to permit any such person to devote substantially less effort to the project than was anticipated when the grant was awarded;
3. to make changes resulting in additions or deletions of staff and consultants related to or resulting in a need for budget reallocation; and
4. to make budget changes exceeding \$1,000 or 10% in any line item budget category, whichever is greater.

3. PROJECT CLOSEOUT, SUSPENSION, TERMINATION

Closeout: Each grant shall be closed out as promptly as feasible after expiration or termination. In closing out the grant, the following shall be observed:

- The grant recipient shall immediately refund, in accordance with instructions from MHEC and/or MEA, any unobligated balance of cash advanced to the grant recipient.
- The grant recipient shall submit all financial, performance, evaluation, and other reports required by the terms of the grant in accordance with the due dates spelled out in this Request for Proposal.
- The closeout of a grant does not affect the retention period for State and/or grantor rights of access to grant records.

Suspension: When a grant recipient has materially failed to comply with the terms of a grant, MEA and MHEC may, upon reasonable notice to the grant recipient, suspend the grant in whole or in part. The notice of suspension will state the reasons for the suspension, any corrective action required of the grant recipient, and the effective date. Suspensions shall remain in effect

until the grant recipient has taken action satisfactory to MEA and MHEC or given evidence satisfactory to MEA and MHEC that such corrective action will be taken or until MEA and MHEC terminate the grant.

Termination: MEA and MHEC may terminate any grant in whole or in part at any time before the date of expiration, whenever they determine that the grant recipient has materially failed to comply with the terms of the grant. MEA and MHEC shall promptly notify the grant recipient in writing of the termination and the reasons for the termination, together with the effective date.

The grant recipient may terminate the grant in whole or in part upon written notification to MEA and MHEC setting forth the reasons for such termination, the effective date, and, in the case of partial terminations, the portion to be terminated. However, if in the case of a partial termination, MEA and MHEC determine that the remaining portion of the grant will not accomplish the purposes for which the grant was made; they may terminate the grant in its entirety.

Closeout of a grant does not affect the right of MEA and MHEC to disallow costs and recover funds on the basis of a later audit or review, nor does closeout affect the grantee's obligation to return any funds due as a result of later refunds, corrections, or other transactions.

4. RECORDS

A grant recipient shall retain the following records for a period of five (5) years after the completion of the grant project:

- records of significant project experience and evaluation results;
- records that fully show amount of funds under the grant, how the funds were used, total cost of projects, all costs and contributions provided from other sources, and other records to facilitate an effective audit

5. REPORTING REQUIREMENTS

To ensure accountability and sound fiscal management, the MHEC Office of Outreach and Grants Management serves as the State monitor of grant activities for Request for Proposals under its purview. In addition to requiring annual progress and final reports, MEA and/or MHEC staff may conduct site visits, undertake telephone interviews, or request written materials for this purpose.

Formal annual progress reports and final reports will also be required from all grantees. At the end of the grant, both a financial and a narrative report will be due to the Commission. All final reports will be approved by MEA and MHEC.

6. INTERIM REPORTS (or ANNUAL PROGRESS REPORTS)

Interim reports will include a narrative and budget report that include but are not limited to:

- Responses to questions posed on the interim report form. (e.g. describe progress to date, is project on track with timeline, what challenges have been encountered)
- Evidence that the project is progressing sufficiently to continue
- Any data as required by the RFA and/or grantor
- The budget report shows how much of the grant has been spent and how much remains in each line item of the original accepted budget application. Fiscal reports for the project must be signed by a financial officer at the institution who is serving as the fiscal agent for the institutional grant. Grantees should keep records indicating how funds are

expended, the total cost of project activities, the share of the cost provided from other sources (in-kind or otherwise), and any other relevant records to facilitate an effective audit; such records should be held for five (5) years after the grant ends. Any unspent grant funds must be returned with the final fiscal report.

- Forms will be provided at <http://www.mhec.state.md.us/Grants/index.asp>.

7. FINAL REPORTS

Final reports should address the success and challenges of the fully implemented project and will include but are not limited to:

- Final reports should address items on the interim report(s) but for the full term of the grant.
- Final reports must be submitted. Principal investigators who fail to submit a final report may be ineligible to apply for future grants managed by MEA and/or MHEC.
- Final reports have a financial report section and a narrative report section (see below for details).
- The final report includes the comprehensive evaluation of the grant. This evaluation will include the evaluation plan components from the accepted proposal. The evaluation should restate the research questions or problems to be addressed and discuss how the project outcomes compared to those stated in the proposal. Include copies of the evaluation instruments, if applicable.

Final reports must be submitted by the stated deadline. Failure to submit a final report may make the principal investigator and/or institution ineligible to apply for future grants from MEA, MHEC or other State entities.

8. ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER

An acknowledgment of MEA and MHEC must appear in any publication of materials based on or developed under this project. Publications other than academic journal publications must also contain the following disclaimer:

“Opinions, findings, and conclusions expressed herein do not necessarily reflect the position or policy of the Maryland Energy Administration and/or the Maryland Higher Education Commission, and no official endorsement should be inferred.”

All media announcements and public information pertaining to activities funded by this grant program should acknowledge support of the Maryland Energy Administration and Maryland Higher Education Commission and adhere to the restrictions laid out herein.

At such time as any article resulting from work under this grant is published in a professional journal or publication, two reprints of the publication should be sent to the Maryland Higher Education Commission Office of Outreach and Grants Management, clearly labeled with appropriate identifying information.